CLAIMS

It is claimed:

A system for concentrating electronic payments comprising
 a clearing network comprising a private electronic data network for financial
 transactions

a communications network comprising a public electronic data network

a biller system comprising a general purpose computer system programmed to
generate bill data, wherein the bill data comprises for each bill an amount due and an
identifier

c-type payor systems comprising a first plurality of payor systems connected to the clearing network, the c-type payor systems comprising general purpose computer systems programmed to make individual electronic payments to the biller via the clearing network, the electronic payments of the c-type payor systems comprising a payment amount and an identifier

e-type payor systems comprising a second plurality of payor systems connected to the communications network, the e-type payor systems comprising general purpose computer systems programmed to make individual electronic payments to the biller via e-mail to an e-mail address associated with the biller, the electronic payments of the e-type payor systems comprising a payment amount and an identifier

a financial institution system connected to the clearing network and the communications network, the financial institution system comprising a general purpose computer system programmed to

provide a depository account for the biller
receive the bill data
receive the electronic payments from c-type payor systems
receive the electronic payments from the e-type payor systems
periodically group the electronic payments

match the grouped electronic payments with the bill data using the amount due and the identifier in the bill data on the one hand, and the payment amount and the identifier from the c-type payor systems and the e-type payor systems on the other hand periodically credit the biller's depository account for the electronic payments from the c-type payor systems and the e-type payor systems.

- 2. The system for concentrating electronic payments of claim 1 wherein the identifiers in the bill data, the c-type payor system payments and the e-type payor system payments comprise bill numbers.
- 3. The system for concentrating electronic payments of claim 1 wherein the identifiers in the bill data, the c-type payor system payments and the e-type payor system payments comprise account numbers for the respective payors.

- 4. The system for concentrating electronic payments of claim 1 wherein the financial institution system is programmed to group the electronic payments from the c-type payor systems separately from the electronic payments from the e-type payor systems.
- 5. The system for concentrating electronic payments of claim 4 wherein the financial institution system is programmed to, in a first process, match the grouped electronic payments from the e-type payor systems with the bill data, and in a second process, match the grouped electronic payments from the c-type payor systems with the bill data.
- 6. The system for concentrating electronic payments of claim 1 further comprising an payment service provider system for making payments on behalf of psp-type payors, the psp-type payors comprising a third plurality of payors.
- 7. The system for concentrating electronic payments of claim 6 wherein the payment service provider system is connected to the clearing network, and the payment service provider system comprises a general purpose computer system programmed to

receive payment authorizations from the psp-type payors

make electronic payments to the biller via the clearing network of aggregated payments for the psp-type payors, the aggregated electronic payments of the payment service provider system comprising a payment amount and an identifier for each individual payment of the psp-type payors.

- 8. The system for concentrating electronic payments of claim 1 wherein the financial institution system is programmed to credit the biller's depository account for the payments from the c-type payor systems and the e-type payor systems on a daily basis.
- 9. The system for concentrating electronic payments of claim 1 wherein the financial institution system is programmed to

periodically generate a receipts report of the matched electronic payments periodically transmit the receipts report to the biller system.

- 10. The system for concentrating electronic payments of claim 9 wherein the financial institution system is programmed to transmit the receipts report to the biller system on a daily basis.
- 11. The system for concentrating electronic payments of claim 1 wherein the financial institution system is programmed to generate an exception report of electronic payments from the e-type payor systems which do not match with the bill data.
- 12. The system for concentrating electronic payments of claim 11 wherein the financial institution system is programmed to transmit the exception report to the biller system.
- 13. The system for concentrating electronic payments of claim 1 wherein the financial institution system is programmed to generate an exception report of all payments which do not match with the bill data.

- 14. The system for concentrating electronic payments of claim 1 wherein the financial institution system is programmed to generate an exception report of payments from the c-type payor systems and the e-type payor systems which do not match with the bill data.
- 15. The system for concentrating electronic payments of claim 14 wherein the financial institution system is programmed to transmit the exception report to the biller system.
- **16.** The system for concentrating electronic payments of claim 1 wherein the clearing network comprises the ACH network.
- 17. The system for concentrating electronic payments of claim 1 wherein the communications network comprises the Internet.
- 18. The system for concentrating electronic payments of claim 1 wherein the biller system is connected to the communications network, the biller system is programmed to transmit the bill data to the financial institution system via the communications network.
- 19. The system for concentrating electronic payments of claim 1 wherein the communications network at least partially includes the clearing network.
- 20. A method of concentrating electronic payments in a financial institution system, the financial institution system comprising a general purpose computer connected to a clearing network and a communications network, the clearing network comprising a private electronic data network for financial transactions, the communications network comprising a public electronic data network, the method comprising

providing a depository account for a biller

receiving the bill data, the bill data comprising for each bill an amount due and an identifier

receiving individual electronic payments from "c-type" payor systems via the clearing network, the electronic payments from the c-type payor systems each comprising a payment amount and an identifier

receiving individual electronic payments from "e-type" payor systems via the communications network, the electronic payments from the e-type payor systems each comprising a payment amount and an identifier

periodically grouping the electronic payments

matching the grouped electronic payments with the bill data using the amount due and the identifier in the bill data on the one hand, and the payment amount and the identifier from the c-type payor systems and the e-type payor systems on the other hand

periodically crediting the biller's depository account for the electronic payments from the c-type payor systems and the e-type payor systems.

21. The method of concentrating electronic payments in a financial institution system of claim 20 wherein in the step of receiving electronic payments from e-type payor systems, the e-mail address is within a domain hosted by the financial institution system.

- 22. The method of concentrating electronic payments in a financial institution system of claim 20 wherein the identifiers in the bill data, the c-type payor system payments and the e-type payor system payments comprise bill numbers.
- 23. The method of concentrating electronic payments in a financial institution system of claim 20 wherein the identifiers in the bill data, the c-type payor system payments and the e-type payor system payments comprise account numbers for the respective payors.
- 24. The method of concentrating electronic payments in a financial institution system of claim 20 further comprising grouping the electronic payments from the c-type payor systems separately from the electronic payments from the e-type payor systems.
- 25. The method of concentrating electronic payments in a financial institution system of claim 24 further comprising separately matching the grouped electronic payments from the etype payor systems with the bill data, and matching the grouped payments from the c-type payor systems with the bill data.
- **26.** The method of concentrating electronic payments in a financial institution system of claim 20 further comprising receiving electronic payments comprising aggregated payments from an payment service provider system on behalf of psp-type payors.
- 27. The method of concentrating electronic payments in a financial institution system of claim 26 wherein the electronic payments from the payment service provider system is received via the clearing network.

- 28. The method of concentrating electronic payments in a financial institution system of claim 20 further comprising crediting the biller's depository account for the payments from the c-type payor systems and the e-type payor systems on a daily basis.
- 29. The method of concentrating electronic payments in a financial institution system of claim 20 further comprising

periodically generating a receipts report of the matched electronic payments periodically transmitting the receipts report to the biller system.

- 30. The method of concentrating electronic payments in a financial institution system of claim 29 further comprising transmitting the receipts report to the biller system on a daily basis.
- 31. The method of concentrating electronic payments in a financial institution system of claim 20 further comprising generating an exception report of electronic payments from the e-type payor systems which do not match with the bill data.
- 32. The method of concentrating electronic payments in a financial institution system of claim 31 further comprising transmitting the exception report to the biller system.
- 33. The method of concentrating electronic payments in a financial institution system of claim 20 further comprising generating an exception report of all payments which do not match with the bill data.

- 34. The method of concentrating electronic payments in a financial institution system of claim 20 further comprising generating an exception report of payments from the c-type payor systems and the e-type payor systems which do not match with the bill data.
- 35. The method of concentrating electronic payments in a financial institution system of claim 34 further comprising transmitting the exception report to the biller system.
- **36.** The method of concentrating electronic payments in a financial institution system of claim 20 wherein the clearing network comprises the ACH network.
- 37. The method of concentrating electronic payments in a financial institution system of claim 20 wherein the communications network comprises the Internet.
- 38. The method of concentrating electronic payments in a financial institution system of claim 20 wherein the biller system is connected to the communications network, further comprising receiving the bill data from the biller system via the communications network.
- 39. The method of concentrating electronic payments in a financial institution system of claim 20 wherein the communications network at least partially includes the clearing network.
- 40. A financial institution system for concentrating electronic payments, the financial institution system having connections to a clearing network and a communications network, the clearing network comprising a private electronic data network for financial transactions,

the communications network comprising a public electronic data network, the financial institution system comprising

means for providing a depository account for a biller

means for receiving the bill data, the bill data comprising for each bill an amount due and an identifier

means for receiving individual electronic payments from "c-type" payor systems via the clearing network, the electronic payments from the c-type payor systems each comprising a payment amount and an identifier

means for receiving individual electronic payments from "e-type" payor systems via the communications network, the electronic payments from the e-type payor systems each comprising a payment amount and an identifier

means for periodically grouping the electronic payments

means for matching the grouped electronic payments with the bill data using the amount due and the identifier in the bill data on the one hand, and the payment amount and the identifier from the c-type payor systems and the e-type payor systems on the other hand

means for periodically crediting the biller's depository account for the electronic payments from the c-type payor systems and the e-type payor systems.

41. The financial institution system for concentrating electronic payments of claim 40 wherein the identifiers in the bill data, the c-type payor system payments and the e-type payor system payments comprise bill numbers.

- 42. The financial institution system for concentrating electronic payments of claim 40 wherein the identifiers in the bill data, the c-type payor system payments and the e-type payor system payments comprise account numbers for the respective payors.
- 43. The financial institution system for concentrating electronic payments of claim 40 further comprising means for grouping the electronic payments from the c-type payor systems separately from the electronic payments from the e-type payor systems.
- 44. The financial institution system for concentrating electronic payments of claim 43 further comprising means for separately matching the grouped electronic payments from the e-type payor systems with the bill data, and matching the grouped payments from the c-type payor systems with the bill data.
- 45. The financial institution system for concentrating electronic payments of claim 40 further comprising means for receiving electronic payments from an payment service provider system comprising aggregated payments on behalf of psp-type payors.
- **46.** The financial institution system for concentrating electronic payments of claim 45 wherein the means for receiving electronic payments from the payment service provider system is adapted to receive the electronic payments via the clearing network.
- 47. The financial institution system for concentrating electronic payments of claim 40 further comprising means for crediting the biller's depository account for the payments from the c-type payor systems and the e-type payor systems on a daily basis.

48. The financial institution system for concentrating electronic payments of claim 40 further comprising

means for periodically generating a receipts report of the matched electronic payments

means for periodically transmitting the receipts report to the biller.

- 49. The financial institution system for concentrating electronic payments of claim 48 further comprising means for transmitting the receipts report to the biller system on a daily basis.
- **50.** The financial institution system for concentrating electronic payments of claim 40 further comprising means for generating an exception report of electronic payments from the e-type payor systems which do not match with the bill data.
- **51.** The financial institution system for concentrating electronic payments of claim 50 further comprising means for transmitting the exception report to the biller system.
- **52.** The financial institution system for concentrating electronic payments of claim 40 further comprising means for generating an exception report of all payments which do not match with the bill data.
- 53. The financial institution system for concentrating electronic payments of claim 40 further comprising means for generating an exception report of payments from the c-type payor systems and the e-type payor systems which do not match with the bill data.

- 54. The financial institution system for concentrating electronic payments of claim 53 further comprising means for transmitting the exception report to the biller system.
- 55. The financial institution system for concentrating electronic payments of claim 40 wherein the clearing network comprises the ACH network.
- **56.** The financial institution system for concentrating electronic payments of claim 40 wherein the communications network comprises the Internet.
- 57. The financial institution system for concentrating electronic payments of claim 40 wherein the biller system is connected to the communications network, further comprising means for receiving the bill data from the biller system via the communications network.
- **58.** The financial institution system for concentrating electronic payments of claim 40 wherein the communications network at least partially includes the clearing network.
- 59. A financial institution system for concentrating electronic payments, the financial institution system comprising a general purpose computer system having connections to a clearing network and a communications network, the clearing network comprising a private electronic data network for financial transactions, the communications network comprising a public electronic data network, the financial institution system being programmed to

provide a depository account for a biller

receive the bill data, the bill data comprising for each bill an amount due and an identifier

receive individual electronic payments from "c-type" payor systems via the clearing network, the electronic payments from the c-type payor systems each comprising a payment amount and an identifier

receive individual electronic payments from "e-type" payor systems via the communications network, the electronic payments from the e-type payor systems each comprising a payment amount and an identifier

periodically group the electronic payments

match the grouped electronic payments with the bill data using the amount due and the identifier in the bill data on the one hand, and the payment amount and the identifier from the c-type payor systems and the e-type payor systems on the other hand

periodically credit the biller's depository account for the electronic payments from the c-type payor systems and the e-type payor systems.

- **60.** The financial institution system for concentrating electronic payments of claim 59 wherein the identifiers in the bill data, the c-type payor system payments and the e-type payor system payments comprise bill numbers.
- 61. The financial institution system for concentrating electronic payments of claim 59 wherein the identifiers in the bill data, the c-type payor system payments and the e-type payor system payments comprise account numbers for the respective payors.
- 62. The financial institution system for concentrating electronic payments of claim 59 wherein the financial institution system is programmed to group the electronic payments

from the c-type payor systems separately from the electronic payments from the e-type payor systems.

- 63. The financial institution system for concentrating electronic payments of claim 62 wherein the financial institution system is programmed to, in a first process, match the grouped electronic payments from the e-type payor systems with the bill data, and in a second process, match the grouped electronic payments from the c-type payor systems with the bill data.
- **64.** The financial institution system for concentrating electronic payments of claim 59 wherein the financial institution system is programmed to receive electronic payments comprising aggregated payments from an payment service provider system on behalf of psp-type payors.
- 65. The financial institution system for concentrating electronic payments of claim 64 wherein the financial institution system is programmed to receive the aggregated payments via the clearing network.
- 66. The financial institution system for concentrating electronic payments of claim 59 wherein the financial institution system is programmed to credit the biller's depository account for the payments from the c-type payor systems and the e-type payor systems on a daily basis.

- 67. The financial institution system for concentrating electronic payments of claim 59 wherein the financial institution system is programmed to
 - periodically generate a receipts report of the matched electronic payments periodically transmit the receipts report to the biller.
- **68.** The financial institution system for concentrating electronic payments of claim 67 wherein the financial institution system is programmed to transmit the receipts report to the biller system on a daily basis.
- 69. The financial institution system for concentrating electronic payments of claim 59 wherein the financial institution system is programmed to generate an exception report of electronic payments from the e-type payor systems which do not match with the bill data.
- **70.** The financial institution system for concentrating electronic payments of claim 69 wherein the financial institution system is programmed to transmit the exception report to the biller system.
- 71. The financial institution system for concentrating electronic payments of claim 59 wherein the financial institution system is programmed to generate an exception report of all payments which do not match with the bill data.
- 72. The financial institution system for concentrating electronic payments of claim 59 wherein the financial institution system is programmed to generate an exception report of

payments from the c-type payor systems and the e-type payor systems which do not match with the bill data.

- 73. The financial institution system for concentrating electronic payments of claim 72 wherein the financial institution system is programmed to transmit the exception report to the biller system.
- **74.** The financial institution system for concentrating electronic payments of claim 59 wherein the clearing network comprises the ACH network.
- 75. The financial institution system for concentrating electronic payments of claim 59 wherein the communications network comprises the Internet.
- 76. The financial institution system for concentrating electronic payments of claim 59 wherein the biller system is connected to the communications network, and the financial institution system is further programmed to receive the bill data from the biller system via the communications network.
- 77. The financial institution system for concentrating electronic payments of claim 59 wherein the communications network at least partially includes the clearing network.